

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (Currently amended) A method for protecting an item of private
2 information in a database, wherein the item of private information is used as a key
3 for retrieving data from the database, wherein the method comprises:
4 receiving the item of private information;
5 creating a hash of the item of private information at a database; and
6 storing the hash of the item of private information in a the database.
- 1 2. (Currently Amended) The method of claim 1, wherein creating the
2 hash can include creating at least one of a Secure Hash Algorithm-1 (SHA-1) or
3 and a Message-Digest algorithm 5 (MD5) hash.
- 1 3. (Original) The method of claim 1, wherein the hash of the item of
2 private information is created by the database in a manner that is transparent to an
3 application which manipulates the private information.
- 1 4. (Original) The method of claim 1, wherein processing a query
2 containing the private information involves:
3 receiving the item of private information;
4 creating a hash of the item of private information; and
5 querying the database using the hash of the item of private information.

1 5. (Original) The method of claim 1, wherein the item of private
2 information can include one of:
3 a social security number;
4 a driver's license number;
5 a passport number;
6 an email address;
7 a person's name; and
8 a person's mother's maiden name.

1 6. (Original) The method of claim 1, wherein multiple items of
2 private information can be combined prior to creating the hash.

1 7. (Currently Amended) The method of claim 1, wherein creating the
2 hash further comprises checking a column attribute in the database to see
3 determine if that "privacy" is enabled, and if so only upon privacy being enabled.
4 creating the hash.

1 8. (Original) The method of claim 1, wherein the database is a
2 Lightweight Directory Access Protocol (LDAP) database.

1 9. (Currently Amended) A computer-readable storage medium storing
2 instructions that when executed by a computer cause the computer to perform a
3 method for protecting an item of private information in a database, wherein the
4 item of private information is used as a key for retrieving data from the database,
5 wherein the method comprises:
6 receiving the item of private information;
7 creating a hash of the item of private information at a database; and
8 storing the hash of the item of private information in the a-database.

1 10. (Currently Amended) The computer-readable storage medium of
2 | claim 9, wherein creating the hash can include creating at least one of a Secure
3 | Hash Algorithm-1 (SHA-1) ~~or~~ and a Message-Digest algorithm 5 (MD5) hash

1 11. (Original) The computer-readable storage medium of claim 9,
2 wherein the hash of the item of private information is created by the database in a
3 manner that is transparent to an application which manipulates the private
4 information.

1 12. (Original) The computer-readable storage medium of claim 9,
2 wherein processing a query containing the private information involves:
3 receiving the item of private information;
4 creating a hash of the item of private information; and
5 querying the database using the hash of the item of private information.

1 13. (Original) The computer-readable storage medium of claim 9,
2 wherein the item of private information can include one of:
3 a social security number;
4 a driver's license number;
5 a passport number;
6 an email address;
7 a person's name; and
8 a person's mother's maiden name.

1 14. (Original) The computer-readable storage medium of claim 9,
2 wherein multiple items of private information can be combined prior to creating
3 the hash.

1 15. (Currently Amended) The computer-readable storage medium of
2 claim 9, wherein creating the hash further comprises checking a column attribute
3 in the database to ~~see-determine if that~~ “privacy” is enabled, and only upon
4 privacy being enabled, if so-creating the hash.

1 16. (Original) The computer-readable storage medium of claim 9,
2 wherein the database is a Lightweight Directory Access Protocol (LDAP)
3 database.

1 17. (Currently Amended) An apparatus for protecting an item of
2 private information in a database, wherein the item of private information is used
3 as a key for retrieving data from the database, comprising:
4 a receiving mechanism configured to receive the item of private
5 information;
6 a hashing mechanism configured to create a hash of the item of private
7 information at a database; and
8 a storage mechanism configured to store the hash of the item of private
9 information in the a-database.

1 18. (Currently Amended) The apparatus of claim 17, wherein the
2 hashing mechanism is configured to use at least one of a Secure Hash Algorithm-1
3 (SHA-1) or-and a Message-Digest algorithm 5 (MD5) hashing functions.

1 19. (Original) The apparatus of claim 17, wherein the hashing
2 mechanism is internal to the database and is transparent to an application which
3 manipulates the private information.

1 20. (Original) The apparatus of claim 17, further comprising a query
2 mechanism configured to perform queries containing the private information,
3 wherein the query mechanism is configured to:
4 receive the item of private information;
5 create a hash of the item of private information; and to
6 query the database using the hash of the item of private information.

1 21. (Original) The apparatus of claim 17, wherein the item of private
2 information can include one of:
3 a social security number;
4 a driver's license number;
5 a passport number;
6 an email address;
7 a person's name; and
8 a person's mother's maiden name.

1 22. (Original) The apparatus of claim 17, wherein the hashing
2 mechanism can be further configured to combine multiple items of private
3 information prior to creating the hash.

1 23. (Currently Amended) The apparatus of claim 17, wherein the
2 hashing mechanism is further configured to check a column attribute in the
3 database to determine see if that "privacy" is enabled, and only upon privacy
4 being enabledif so, to create the hash of the private information.

1 24. (Original) The apparatus of claim 17, wherein the database is a
2 Lightweight Directory Access Protocol (LDAP) database.